Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application.

Listing of Claims:

1. (Previously Presented) A system for manufacturing pre-formatted thin tape linear optical data storage media including an elongated linear polymer layer with a thickness of about 4 μm to about 100 μm and an optical recordable layer, the system comprising:

a drum configured to receive the elongated linear polymer layer and for rotation about a rotation axis, and including a circumferential outer surface and a predetermined pattern of protrusions for embossing at least one pattern of optically readable embossments in an elongated linear polymer layer rolled on the drum;

one or more deposition sources configured to apply the optical recordable layer covering the pattern of optically readable embossments of the elongated linear polymer layer; and

a radiation source configured to cause the pattern of optically readable embossments of the elongated linear polymer layer to solidify prior to the embossments being removed from the protrusions of the outer surface of the drum, wherein the radiation source is a light source.

2. (Previously Presented) A system according to claim 1, further comprising a dispenser for dispensing a liquid between the outer surface of the drum and an elongated linear polymer layer rolled on the drum.

3. (Previously Presented) A system according to claim 2, wherein the dispenser contains a chemical for softening the surface of the polymer layer, and wherein the radiation source provides heat for causing the pattern of optically readable embossments of the elongated linear polymer layer to solidify.

4. (Previously Presented) A system according to claim 2, wherein the dispenser contains a liquid polymeric material that can be hardened by radiation of a predetermined wavelength, and wherein the embossments are made in the liquid polymeric material and the radiation source provides radiation of the predetermined wavelength.

5. (Previously Presented) A system according to claim 1, further comprising backing rollers pressing the elongated linear polymer layer against the drum.

6. (Previously Presented) A system according to claim 1, further comprising a vacuum chamber, wherein the vacuum chamber is adapted to receive the embossed elongated linear polymer layer.

7. (Canceled)

8. (Previously Presented) A system according to claim 1, further comprising an optical head array adapted to write recording marks in the optical recordable layer over the pattern of optically readable embossments, wherein the optical head array includes auto-focus and servo-tracking functionality.

9. (Previously Presented) A system according to claim 1, wherein the protrusions of the drum comprise ridges and bosses.

10. (Previously Presented) A system according to claim 1, wherein the protrusions of the drum form a pattern of optically readable embossments providing header information, servo and error correction information, pre-recorded digital information, and pre-recorded analog information.

11. (Currently Amended) A method for manufacturing pre-formatted linear optical data storage media including an elongated linear polymer layer and an optical recordable layer, the method comprising:

softening a surface of an elongated linear polymer layer with a thickness of about 4 μm to about 100 μm;

embossing at least one pattern of optically readable embossments in the softened surface of the elongated linear polymer layer using a drum having protrusions on an outer surface;

applying an optical recordable layer covering the pattern of optically readable embossments of the elongated linear polymer layer;

applying radiation to the elongated linear polymer layer, wherein the radiation comprises light of a suitable wavelength;

by application of the radiation, causing hardening of the embossed surface of the elongated linear polymer layer; and

after hardening by application of radiation, removing the linear polymer layer, along with the optical recording layer, from the drum.

12. (Original) A method according to claim 11, further comprising dispensing a softening agent onto the surface of the polymer layer to soften the surface prior to embossment, and then hardening the embossed surface by heating.

13. (Original) A method according to claim 11, wherein a liquid polymeric material that can be hardened by radiation is applied to the surface of the polymer layer, and wherein the embossments are made in the liquid polymeric material, and then radiation of an appropriate wavelength is applied the liquid polymeric material after embossing to cause the liquid polymeric material to become solid.

14. (Canceled)

15. (Previously Presented) A method according to claim 11, further comprising forming recording marks in the optical recordable layer.

16. (Previously Presented) A method according to claim 11, wherein the optical recordable layer comprises a dielectric layer, a phase change recording layer, and a reflection/thermal control/nucleation layer.

17. (Original) A method according to claim 11, wherein the pattern of optically readable embossments comprise lands and grooves, and wherein side walls of the grooves are wobbled for tracking purposes.

18. (Original) A method according to claim 11, wherein the optically readable embossments provide header information, servo and error correction information, pre-recorded digital information, and pre-recorded analog information.

19. (Previously Presented) A method according to claim 11, wherein the optical recordable layer is embedded into the polymer layer simultaneous with the embossment.

20. (Previously Presented) An apparatus according to claim 2, wherein the dispenser contains a dye for embedding the optical recordable layer into the polymer layer simultaneous with the embossing.